"Punch List" for Restoration of Sedimentation Basin at Waimanalo Gulch Sanitary Landfill
(paragraph 19.h. of the January 2011 AOC between WMH and EPA)

Prepared by EPA Region 9, 28 June 2011

This punch list was prepared based EPA's site inspection of 9 June 2011 and AECOM's 15 June 2011 letter report Subject: "Sedimentation Basin Restoration Observation Report, Waimanalo Gulch Sanitary Landfill, Kapolei, HI" ("AECOM's report")

1) In the northern basin, the riprap energy dissipater at the 18- and 24-inch diameter storm water outfall pipes appears to still be in poor condition, not very expansive (particularly by the 18-inch pipe), with many soil fines still downstream of the outfalls (Photo 28 of AECOM's report).
2) The access ramps/roads built to perform the restoration need to be stabilized by either vegetation or gravel and compaction (Photo 11 of AECOM's report).
3) The interior side slopes of both the northern and southern basins need to be re-vegetated for erosion control consistent with Note 1 on Drawing C-11 of the GEI 21 February 2011 Work Plan which states "Contractor shall hydro-seed all exposed slopes of the top and interior berms of the detention pond after construction operations."
4) The Work Plan specified the removal of sediment and debris from the northern basin to restore the basin floor to its design elevation of 65.0 feet MSL and in Section 2.2 of AECOM's report it is reported that this was achieved. However, visual observation by EPA staff raised the concern that the floor of the northern basin near the upstream (northern) side of the 4-feet high interior berm might have been excavated to a greater depth thus increasing the risk of undermining the interior berm. Please revisit this part of the floor excavation and backfill and compact as necessary to prevent undermining of the interior berm. Address this item in coordination with Item 5.
5) Based on EPA staff's observations and Photos 31 and 32 of AECOM's report, it appears the removal of sediment and inspection/repair of riprap armoring the interior berm might not have been thoroughly completed. Please fully uncover, inspect and repair any damaged or missing riprap on the interior berm per the GEI Work Plan. Additionally, from what was observable, the detention pond's interior berm dimensions do not appear to coincide with those shown in Detail 2 on Drawing C-11; please restore accordingly.
6) In performing the restoration 4-inch diameter perforated HDPE pipe was used in the subdrain rather than the 6-inch noted in the design drawings because the existing ("as-built condition") was found to be 4-inch pipe. Please provide either an engineering analysis that confirms this change in pipe size is adequate to conform to the original design basis, or replace the 4-inch diameter pipe with the 6-inch size included in the approved Work Plan.